Woodsmoke Reduction Program Program Guidelines

February 15, 2023

FISCAL YEAR 2021-2022 APPROPRIATION





Contents

Executive Summary	1
Program Goals and Objectives	2
Stove Eligibility and Performance Standards	4
I. Existing Home Heating Devices	4
II. Replacement Device	6
Eligible Applicants	8
Eligible Cost	9
Eligibility	10
Approval Process	12
GHG Reductions	15
Outreach and Education	15
Co-benefits	16
Key Dates and Deadlines	17
Reporting and GHG Quantification	17
Disbursement of Funds	19
Program Review	19

Executive Summary

The Woodsmoke Reduction Program is part of California Climate Investments (CCI), a statewide program that puts billions of cap-and-trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment—particularly in disadvantaged communities. The cap-and-trade program also creates a financial incentive for industries to invest in clean technologies and develop innovative ways to reduce pollution. CCI projects include affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, more sustainable agriculture, recycling and much more. Statute establishes investment minimums for disadvantaged and low-income communities and low-income households. For more information, visit *California Climate Investments*.¹

Senate Bill 563² established the Woodsmoke Reduction Program (Program) to be administered by the California Air Resources Board (CARB) to promote the voluntary replacement of old wood-burning stoves with cleaner and more efficient home heating alternatives. The legislation also authorizes money from the Greenhouse Gas Reduction Fund (GGRF) to be appropriated for incentives offered as part of the Program. State Budgets appropriate \$5,000,000 in fiscal year (FY) 2016-2017,3 \$3,000,000 in FY 2018-2019,4 and \$5,000,000 in FY 2021-2022⁵ to CARB to incentivize replacement of old, uncertified woodburning devices with cleaner options. The Program, administered by CARB, is implemented by the California Air Pollution Control Officers Association (CAPCOA) in coordination with local air pollution control districts or air quality management districts (Districts). CAPCOA determines how much funding will be available to each District participating in the Program. The Program implemented in each participating District is considered a Project while an individual woodstove replacement is called a change-out. CARB developed Program Guidelines (Guidelines) to help CAPCOA and Districts set up Projects that meet the State's statutory requirements and policy objectives for appropriations from GGRF. The first Guidelines, addressing the 2016-2017 appropriation, were published on September 9, 2017,6 the second update, addressing the 2018-2019 appropriation, on May 21, 2019, and the current Guidelines address the 2021-2022 appropriation. The Program is designed to help households replace an uncertified wood stove or wood insert, or a fireplace used as a

-

¹ https://ww2.arb.ca.gov/our-work/programs/california-climate-investments

² Lara, Chapter 671, Statues of 2017, adding Health and Safety Code sec. 39733.

³ Assembly Bill (AB) 1613, Committee on Budget, Chapter 370, Budget Act of 2016, Item 3900-101-3228, Section 10, Provision 4.

⁴ Senate Bill (SB) 856, Committee on Budget, Chapter 30, Budget Act of 2018, Item 3900-101-3228, Section 36, Provision 2.

⁵ Senate Bill (SB) 170, Committee on Budget, Chapter 240, Budget Act of 2021, Item 3900-101-3228, Section 87, Provision 2.

⁶ https://ww2.arb.ca.gov/our-work/programs/residential-woodsmoke-reduction/woodsmoke-reduction-program ⁷ lbid.

primary source of heat, with a cleaner-burning and more efficient device. The replacement devices emit less greenhouse gases (GHG) and other air pollutants; they also are less likely to start fires than old stoves that may have been improperly installed. The Program will offer incentives towards the purchase and installation of the qualifying device. California residents using uncertified wood stoves or wood inserts manufactured before July 1, 1988 or using fireplaces as a primary heat source in Districts awarded Program funds are eligible for this Program. The incentive amount will vary depending on the location of the residence and the household income, with some households qualifying for full replacement cost. The Program will include an outreach and educational component to ensure that households make informed decisions about how to burn and what to burn to maximize the efficiency of the device and minimize pollution. This Program will further the goals of California Health and Safety Code Division 25.5,8 reduce GHG emissions, improve air quality, and protect the health, safety, and well-being of California residents.

These Program Guidelines apply to FY 2021-2022 GGRF appropriations and will be updated in future years as appropriate. The replacement of existing wood-burning devices with cleaner technologies provides an important opportunity to promote lower-carbon clean heating powered by renewable energy by offering incentives only for electric heating and the cleanest wood-burning devices. Therefore, contingent on reauthorization and funds, future guidelines will continue to maximize GHG reductions while still addressing the need to provide applicants within disadvantaged or low-income communities and low-income households, as well as households on tribal lands low-income communities or households funding for lower-carbon clean heating options. Future guidelines may also consider administrative streamlining based on the experience gained through implementation.

Program Goals and Objectives

The Program furthers the goals of Health and Safety Code Division 25.5 and reduces GHG emissions by offering incentives toward the replacement of existing uncertified residential wood burning devices used for space heating with cleaner options. For the purpose of this Program, a stove refers to a permanently installed free-standing wood stove, pellet stove, or electric heater stove or one installed in a masonry fireplace cavity or other enclosure (commonly referred to as an insert). The current iteration of the Program is funded through the appropriation of \$5,000,000 in FY 2021-2022 from the Greenhouse Gas Reduction Fund.9 The Program, administered by CARB, will be implemented by CAPCOA in coordination with Districts. CAPCOA will determine how much funding will be available to each District

⁸ Appropriations from the GGRF must further the purposes of Health and Safety Code Division 25.5, added and amended by AB 32 (Global Warming Solutions Act of 2006, Pavley and Nuñez, Chapter 488, Statutes of 2006), SB 32 (Pavley, Chapter 249, Statutes of 2016), AB 197 (E. Garcia, Chapter 250, Statutes of 2016), and AB 398 (E. Garcia, Chapter 135, Statutes of 2017), and other legislation.

⁹ Item 3900-102-3228 of the Budget Act of 2021, as amended by SB170 (Chapter 240, Statutes of 2021).

participating in the Program. To be eligible for the Program, a homeowner or renter, for the purpose of this document referred to as an Applicant, must currently use an uncertified wood stove or wood insert manufactured before July 1, 1988, or fireplace as a primary heat source in Districts awarded Program funds. The incentive amount will depend on where the property is located and Applicant's household income, with some households qualifying for full replacement cost. The Program will maximize benefits to households in disadvantaged or low-income communities and low-income households, as well as households on tribal lands, and has as a goal to distribute 75 percent of the total funding to these priority populations. 10 Applicants residing in a census tract identified as a disadvantaged¹¹ or low-income¹² community can qualify for higher incentives. Applicants residing outside of a census tract identified as a disadvantaged or low-income community, who can demonstrate low-income eligibility based on household income, can also qualify for higher incentives. 13 Applicants residing on tribal lands can also qualify for higher incentives. All other Applicants are eligible for lower incentives. Benefits to disadvantaged and low-income communities and low-income households will be evaluated using criteria listed on the CCI Quantification, Benefits, and Reporting Materials website. 14 Projects are expected to meaningfully address an important community need by reducing exposure to local environmental contaminants, such as toxic air contaminants and criteria air pollutants.

The existing uncertified wood stove, wood insert, or fireplace must be replaced with an electric heat pump, electric stove heater, certified pellet stove, or wood stove approved for this Program, as described in the "Replacement Device" section below. Only select wood stoves are eligible for incentives as part of this Program, which is necessary to ensure that the replacement devices reduce emissions as anticipated.

_

¹⁰ Priority populations include residents of: (1) census tracts identified as disadvantaged by California Environmental Protection Agency per SB 535; (2) census tracts identified as low-income per AB 1550; or (3) a low-income household per AB 1550. Current definitions and designations are available at: www.arb.ca.gov/cci-communityinvestments.1550.

¹¹ Disadvantaged community census tracts are identified by CalEPA per *SB* 535 (De León, Chapter 830, Statutes of 2012), and available at http://www.calepa.ca.gov/EnvJustice/GHGInvest/

¹² Low-income communities are defined as census tracts with a median household income at or below 80 percent of the statewide median household income or with a median household income at or below the threshold designated as low-income by Department of Housing and Community Development's State Income Limits adopted pursuant to the Health and Safety Code Section 50093 (AB 1550 (Gomez, Chapter 369, Statutes of 2016). Maps of low-income communities are available at https://www.arb.ca.gov/cci-communityinvestments.

¹³ Low-income households are those with household incomes at or below 80 percent of the statewide median household income or with household incomes at or below the threshold designated as low-income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093. (*AB 1550*, Gomez, Chapter 369, Statutes of 2016.) Districts will be responsible for verifying household income eligibility.

¹⁴ Available at: https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials

The Program will achieve GHG emission reductions from the increased efficiency and reduced emissions of the newly installed devices. Older, uncertified wood stoves are often inefficient, high-polluting, and may pose a fire risk. The replacement options selected for this Program should reduce greenhouse gas and particulate matter emissions. Co-benefits include significant and long-term reductions in emissions of criteria pollutants and toxic air contaminants, along with reduced fire risk and reliance on fossil fuels thereby accelerating transition to lower carbon home heating.

The replacement device must be installed by a professional, appropriately licensed stove installer (Installer) and meet local fire and building codes. A professionally installed device will improve the health, safety, and comfort of all residents. To ensure reductions in emissions are permanent, any wood stove removed through this Program must be rendered permanently inoperable and recycled, if recycling is available in the area. If the replacement device is a ductless mini-split heat pump, household may be allowed to retain the old wood burning device to serve as emergency heat in case of a power outage. The approval to retain the old device will be granted on a case-by-case basis by the District. Households would be required to sign an agreement to use their old device only in case of a power outage.

The Program will include outreach and educational components to both inform residents about the benefits of switching to cleaner burning home heating devices and train them on the proper operation and maintenance to maximize the device efficiency and minimize pollutant emissions.

The Program implemented in each participating District will be considered a Project. The Project will comprise all of the change-outs, for which Program funds are being used, within the District's jurisdiction along with the administrative work required to implement them.

Stove Eligibility and Performance Standards

I. Existing Home Heating Devices

To be eligible for the Program, an Applicant must be currently relying on an operational uncertified wood stove or insert, or fireplace, as a primary source of heat in the residence.

An uncertified wood stove or insert is one that has not been certified by the U.S. EPA to comply with the performance and emission standards as defined in Title 40 Code of Federal Regulations, Part 60, Subpart AAA, February 28, 1988, or any subsequent revisions. To determine if the existing stove is uncertified, Applicant may do the following:

• Determine when the wood stove was installed. Wood stoves installed before July 1, 1988 do not comply with the particulate emission standards and therefore qualify for this Program.

- Check the stove model against the U.S. EPA current and historical list of certified¹⁵ wood heaters. If the stove's manufacturer and model is not on the current and historical lists, the stove is considered uncertified.
- Check the back of the wood stove for a certification label. Wood stoves which do not have any label describing particulate matter emission standards qualify for this Program. Wood stoves certified by the U.S. EPA to comply with any of the particulate emission standards are not eligible for replacement through this Program. These stoves will have a label, like that pictured in Figure 1, permanently affixed to them stating that the stove is certified to comply with the 1988, 1990, 2015, or 2020 U.S. EPA standards.

Applicants will determine the eligibility of their current wood stove. Applications will be reviewed by the District to determine if preliminary qualification requirements have been met. The wood stove's eligibility will be verified by the District or an Installer during an in-home estimate.

An Applicant using a fireplace as a primary source of heat could also qualify for this Program. Section III, Eligible Home Heating Replacements, includes more information on how to qualify for this type of change-out.

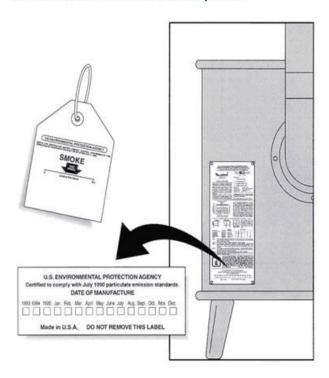
Only operational devices, currently installed in a residence, and used as a primary source of heat qualify for this Program. Applicants who remove the device prior to an in-home estimate will be disqualified.

5

¹⁵ U.S. EPA Certified Wood Stove Database: https://www.epa.gov/compliance/epa-certified-wood-heater-database

Figure 1. U.S. EPA Stove Certification Label

EPA certification label circa 1988 to present



II. Replacement Device

The uncertified wood stove or insert, or fireplace, must be replaced by an eligible replacement device. The following types of home heating devices are eligible for this Program:

- Electric stove heaters,
- Electric heat pumps,
- Pellet stoves,
- Hybrid wood stoves,
- Catalytic wood stoves, and
- Select non-catalytic wood stoves.

In a 2021 report, Assessment of U.S. EPA's Residential Certification Program Northeast States of Coordinated Air Use Management¹⁶ (NESCAUM) revealed significant problems with the current wood stove certification program. As a result of significant flexibility in testing combined with limited oversite, many wood stoves certified by U.S. EPA as meeting the

¹⁶ https://www.nescaum.org/documents/nescaum-review-of-epa-rwh-nsps-certification-program-rev-3-30-21.pdf/

current New Source Performance Standard (NSPS) may have higher emissions than old uncertified stoves they are replacing. Most wood stoves on the market use either a secondary combustion system (non-catalytic stoves) or a catalytic combustor (catalytic stoves) to meet the U.S. EPA emission standards. Hybrid wood stoves combine a catalytic combustor with the secondary combustion system in one.

To ensure that the replacement devices reduce emissions as anticipated only certain wood stoves are eligible to receive incentives as part of this Program. Any pellet, catalytic or hybrid (catalytic/non-catalytic) wood stove meeting the current NSPS is an eligible replacement device. Catalytic and hybrid stoves had demonstrated lower emissions when tested with the Integrated Duty Cycle (IDC) test method approved by the U.S. EPA as a broadly applicable Alternative Test Method (ATM). The IDC test assesses appliance performance under a range of operating and fueling conditions to better represent in-home use. Catalytic and hybrid wood stoves meeting current NSPS certification may be identified by performing an advanced search and selecting the appropriate subtype (catalytic stove or hybrid) from the U.S. EPA Certified Wood Stove Database. 17 Non-catalytic stoves do not perform as well in IDC testing, but to provide households with some non-catalytic options, four stoves approved by the State of Alaska for installation in the Fairbanks PM2.5 Nonattainment Area, listed in Table 1, will be eligible for incentives. CARB will work with an independent contractor to test additional devices and update the list of eligible non-catalytic stoves on the Program website as appropriate. Additional devices may also be listed based on U.S. EPA retestina.18

Table 1. Non-Catalytic Wood Stoves Eligible for Incentives

Manufacturer Name	Model Name	Annual Avg Emission Rate (grams/hr)
Energy Distribution	Invicta Group: Kazan, Kazan GA, Kiara, and Kiara GA	1.8
Energy Distribution	Gaya Ardoise, Itaya, Onyx, Gaya Feuille, Symphonia, Antaya, Theïa, Akan	1.9
HHT/Hearth and Home Tech	21M-ACC-C, Discovery-1-C	1.7
Hearth and Home Technologies	Quadra Fire Expedition II and Vermont Castings Montpelier II	1.8

¹⁷U.S. EPA Certified Wood Stove Database: https://www.epa.gov/compliance/epa-certified-wood-heater-database

¹⁸ See https://www.epa.gov/burnwise/epa-approved-test-labs-and-third-party-certifiers-residential-wood-heaters.

The replacement device must be permanently installed by a professional, appropriately licensed Installer participating in this Program. A list of participating Installers will be established by CAPCOA or each participating District. Self-installation of heating devices will not be allowed under this Program. Portable home heating devices not permanently affixed to the home structure are not eligible replacement options. Any building permits or other required approvals shall be obtained per local, tribal, or State ordinances and shall be the responsibility of the Installer or the Applicant. Districts will be responsible for verifying that each change-out is permitted and inspected in accordance with State, local, and/or tribal ordinances before payment is issued to the Installer or the Applicant.

Eligible Applicants

Applicants interested in replacing their uncertified wood stove or wood insert, or fireplace with an eligible replacement device qualify for this Program if they meet all of the requirements listed below:

- Use an uncertified wood stove or wood insert, or a fireplace, currently operational, as a primary source of heat;
- Select a replacement device which meets stove eligibility in Section II;
- Plan to have the replacement device professionally installed by a participating Installer;
- Agree to receive training on proper wood storage and wood burning practices (if applicable) and device operation and maintenance; and
- Surrender their old wood stove or insert to the Installer who will render it permanently inoperable and recycle it, if recycling is available in the area. If the replacement device is an electric heat pump, District may allow retaining the original heating device to be used only during power outages.

This Program provides incentives for one replacement per household. Households that previously received Program incentives are not eligible. The replacement device must be a primary source of heat in the house. The Program is available for residences occupied by owners or long-term renters. In the case of rental properties, formal approval from both the property owner and the renter will be required as part of the approval process. To qualify for an incentive, the owner will have to agree to not raise the rent of the unit for a period of two years or evict the unit's residents because of increased value of the unit due solely to the newly installed home heating device. Retroactive rebates are not available under this program, so Applicants who remove the old device or purchase a new replacement device prior to being approved for this Program will be disqualified. The old, uncertified device must be rendered permanently inoperable and recycled, if recycling is available in the area, before payment can be issued to the Installer.

Burning wood in a fireplace is very inefficient for home heating purposes; fireplaces are therefore not typically used as a primary source of heat. In rare situations when an Applicant uses a fireplace as a primary source of heat, the Applicant may qualify for the Program. If the existing fireplace is structurally sound, the Program may offer an incentive to be used towards purchase and installation of an eligible fireplace insert. However, if the fireplace is lacking structural integrity, the incentive could be used towards the purchase of an eligible free-standing home heating device or a heat pump. In this case, the fireplace and chimney must be rendered permanently inoperable to prevent use of the fireplace. Verification of inoperability would be the responsibility of the District. If the replacement device is an electric heat pump, District may allow retaining the original heating device to be used only during power outages.

Installers interested in participating in this Program must agree to the Program's terms and conditions by signing an agreement with the District. Each District will establish their own requirements, but at a minimum, in order to participate in the Program, the Installer will be required to agree to the following:

- Abide by the terms and conditions of the Program;
- Unless verified by the District, verify that the old device and the replacement device qualify for the Program;
- Conduct professional installation of the qualified device in compliance with all applicable State, county, city, or tribal codes/ordinances;
- Provide residents with training on device operation and maintenance and, if applicable, for wood burning devices, best practices in wood storage and wood burning; and
- Render the old device inoperable and recycle it, if recycling is available in the area.

Only Installers who have a signed agreement with CAPCOA or the District will be eligible to participate in the Program. Installers will be responsible for ensuring that all installations are done in accordance with any applicable State, county, or city codes/ordinances, including obtaining any applicable permits and having the installation inspected. Agreements must include the components required by this document and should include key milestone dates and participant requirements for maintaining eligibility prior to Project completion.

Eligible Cost

Eligible change-outs costs include the cost of the new device including sales tax, installation including any parts, materials, permits, or labor required for the safe and legal installation of the new device removal and disposal of the old wood stove or insert, and, if applicable, rendering fireplace inoperable. The Installer will be required to provide a base estimate for the installation of a basic heating device that will be safe, clean-burning, and efficient. Upgrades above the base estimate will be paid by the Applicant. The incentive structure will be determined by CAPCOA or each individual District but incentives can't exceed the actual

total change-out cost and are limited to a maximum of \$5,000 or \$2,500 per property or household for pellet and hybrid stoves or electric heating devices for Enhanced and Standard Incentives, respectively. A maximum of \$10,000 or \$5,000 per property or household will be allowed for electric heat pump installations for Enhanced and Standard Incentives, respectively. Districts will pay the Installer (voucher model) or Applicant (rebate model) the approved incentive amount. Any additional balance due will be paid by the Applicant.

Applicants who remove the high-polluting device or purchase a new device prior to being approved for this Program will be disqualified from obtaining compensatory funds. Heating devices or inserts designed exclusively for aesthetic and decorative use are not eligible for this Program.

All eligible costs must be supported by appropriate documentation. Any cost that is not directly related to the change-out, including cost of remodeling work beyond what is required to complete the change-out, is not eligible for an incentive. Total costs may not exceed the maximums noted above. Costs incurred outside of the performance period, indirect/overhead costs, and cost of food or beverages (e.g., served during outreach events) are not eligible for reimbursement. Indirect/overhead costs are expenses of doing business that are of a general nature and are incurred to benefit two or more functions within an organization. Examples of indirect costs include salaries and benefits of employees not directly assigned to work on the Program, functions such as personnel, business services, information technology, and salaries of supervisors. Examples of overhead costs include rent, utilities, and supplies.

The total cost of administering the Program (i.e., the total administrative costs incurred by both CAPCOA and Districts) cannot exceed \$500,000, which is 10 percent of the total 2021-2022 appropriation.

Eligibility

Households using uncertified wood stoves, wood inserts, or fireplaces as a primary heat source are eligible for an incentive towards replacing their old heating device with a cleaner option. The incentive amount will be determined by each District in coordination with CAPCOA, but may not exceed a maximum of \$5,000 for wood stove, pellet stove, or electric stove heater or \$10,000 for electric heat pump. The general structure of incentives must adhere to the following rules:

- Low-income households and households located in disadvantaged or low-income communities or on tribal lands will be eligible to replace their heating device for little or no cost. They will qualify for a higher incentive (Enhanced Incentive). The maximum allowable Enhanced Incentive level is \$10,000 for an electric heat pump and \$5,000 for all other types of heating devices;
- All other households, regardless of their income, will qualify for a smaller incentive (Standard Incentive) to be applied towards the purchase and installation of the new

device. CAPCOA, in coordination with the District, will determine the maximum allowable Standard Incentive level, not to exceed \$5,000 for an electric heat pump and \$2,500 for all other types of heating devices; and

- CAPCOA, in coordination with the District, will implement the Program with the goal
 of directing 75 percent of the funds for Enhanced Incentives to help low-income
 households and households in disadvantaged and low-income communities, with an
 emphasis on outreach to households located on tribal lands within the District, replace
 their old wood stoves for little or no cost. This goal could be accomplished in a variety
 of ways and Districts are encouraged to explore different options to assist in meeting
 this Program-wide goal. Examples of two possible scenarios could include:
 - Conducting a District-wide solicitation during which all applications would be collected and reviewed, and priority would be given to those Applicants qualifying for Enhanced Incentives.
 - Implementing the Project in two phases. During the first phase, only applications from low-income households and households in disadvantaged and low-income communities or on tribal lands would be accepted. During the second phase, the Project would be open to all Applicants.

Every Applicant using an uncertified wood stove or fireplace as a primary source of heat for their home qualifies for a Standard Incentive without any need for income verification. To qualify for the higher Enhanced Incentive, the Applicant must reside on tribal land or in a disadvantaged or a low-income community or demonstrate a household income not exceeding a low-income threshold specified below. Income verification will not be required for Applicants residing on tribal lands or in disadvantaged or low-income communities.

Applicants residing outside of disadvantaged and low-income communities and tribal lands wishing to be considered for Enhanced Incentives are required to demonstrate that their household income does not exceed one of the following thresholds:

- 1) 80 percent of the Statewide Median Household Income (MHI);¹⁹ or
- 2) County-specific California Department of Housing and Community Development (HCD) low-income limits.²⁰

Districts will be responsible for verifying household income eligibility. Districts can qualify an Applicant based on the higher allowable maximum income (80 percent MHI or HCD lowincome limits).

For purposes of the Program, there are multiple methods to demonstrate household income eligibility. Applicants may demonstrate eligibility by presenting pay stubs or tax returns for

¹⁹ U.S. Census Bureau, American Community Survey, 5-year Estimates available at: https://www.census.gov/quickfacts/fact/table/CA,US/PST045221

²⁰ California Department of Housing and Community Development Official State Income Limits available at: http://www.hcd.ca.gov/state-and-federal-income

each person living in the residence to District personnel for verification and, if qualifying using the HCD low-income limits, reporting the number of people in the household.

Eligibility may also be established through proof of participation in an existing federal or State low-income assistance program, several examples of which are listed below. In cases where an Applicant chooses to demonstrate eligibility through participation in an alternate low-income program, Districts will work with CARB staff to verify that the alternate program's income limits do not exceed Enhanced Incentive income limits for their area.

- U.S. Department of Agriculture Women, Infants and Children (WIC) Program;
- U.S. Department of Health and Human Services Low Income Energy Assistance Program (LIHEAP);
- California Alternate Rates for Energy (CARE) Program with a participating California utility company.

Approval Process

Applicants will be required to complete an application. They must agree to provide information to the District and allow the District and/or Installer to verify that information. They must also agree to receive training on proper wood storage and wood burning practices (if applicable) and device operation and maintenance. The District will be responsible for verifying the following:

- Eligibility of the existing device ensuring that the existing wood stove, wood insert, or fireplace²¹ is uncertified, operational, and used as a primary heat source in the house;
- Eligibility of the replacement stove ensuring that the replacement device is eligible for the Program as described in Section II; and
- If applying for the Enhanced Incentive, eligibility as a resident of a disadvantaged or low-income community, tribal lands, or a low-income household.

The application will be reviewed to determine if the preliminary qualification requirements have been met. Figure 2 illustrates the approval process and helps determine Program eligibility. The District will notify the Applicant whether the application was approved for participation in the Program. Districts must inform Applicants that applications will be treated in accordance with Public Records Act requirements and that certain information, subject to those requirements, may be publicly disclosed.

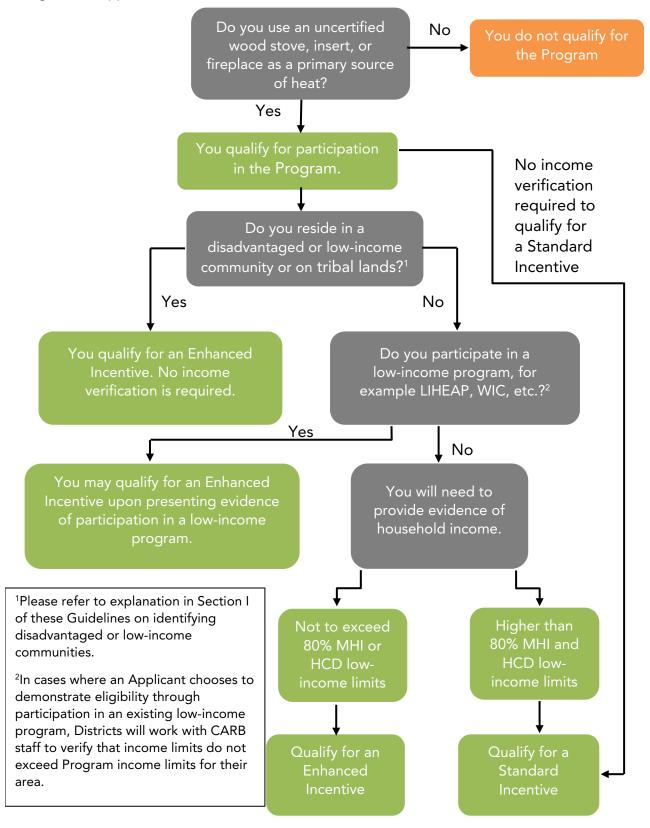
Once approved, the Applicant will schedule an in-home estimate with a participating Installer. The Installer will verify the stove's eligibility and present an estimate to the Applicant. The District will have the flexibility to run the Program as a voucher or a rebate

12

²¹ All fireplaces are considered uncertified heating devices.

model. If a Program follows a voucher model, qualified Applicants are issued vouchers that provide an instant discount of the cost of purchase, installation, and disposal of a qualifying device. If a Program follows a rebate model, qualified Applicants are issued rebates after they submit the required documents showing that they have purchased a qualifying device, had it installed by a participating Installer, and properly disposed of their old appliance. Districts must verify that the old device was deemed permanently inoperable and recycled, if recycling is available in the area, before issuing payment for the change-out. Districts choosing to follow a rebate model must ensure that low-income households and households in disadvantaged and low-income communities and on tribal lands are able to participate. This may require offering vouchers in lieu of rebates or administering the Project with a combination of rebates and vouchers.

Figure 2. Approval Process



GHG Reductions

Switching from an uncertified wood stove or a fireplace to a U.S. EPA certified pellet stove or eligible wood stove reduces GHG emissions as these stoves are cleaner burning and more energy efficient. Design features in newer pellet stoves and wood stoves promote more complete combustion, reducing emissions of methane, a GHG pollutant.²² They also typically use significantly less fuel to produce the same amount of heat as an uncertified stove.²³ This reduction in fuel use will further reduce GHG emissions by a similar amount. Switching from an uncertified wood stove to an electric stove heater or electric heat pump will also typically reduce GHG emissions. In the absence of a mechanism to verify that the wood burned in an Applicant's primary heating device is waste material harvested pursuant to an approved timber management plan prepared in accordance with the Z'berg-Nejedly Forest Practice Act of 1973 or other locally or nationally approved plan and harvested for the purpose of forest fire fuel reduction or forest stand improvement, biogenic CO₂ is included in the calculation of GHG benefits for these devices.

Outreach and Education

CAPCOA and the Districts will be responsible for promoting the Program and helping households understand the benefits of changing from an uncertified wood stove to a cleaner home heating device. Since the Program-wide goal is to distribute 75 percent of total funding to residents of disadvantaged and low-income communities and low-income households and tribal lands, the outreach should focus on reaching this segment of the population.

CAPCOA and the Districts will also incentivize outreach and promotion of the Program with local tribal authorities and prioritize implementation on tribal lands.

The Program requires an educational component to ensure that the new home heating devices, particularly pellet stoves and wood stoves, are properly operated and maintained to maximize energy efficiency and achieve the lowest possible emission rates. With proper burning techniques and properly seasoned wood, if using a wood stove, the amount of wood used and emissions generated could be significantly reduced. User operation is important for achieving anticipated reductions. CAPCOA and the Districts will be required to ensure that each change-out is supplemented with a training component. This could be accomplished by

²² Residential wood stove emissions are in AP 42, Fifth Edition, Volume I, Chapter 1, External Combustion Sources, Section 1.10, web link: https://www3.epa.gov/ttn/chief/ap42/ch01/final/c01s10.pdf
²³ LLS, EPA Burn Wise Publication, How to Implement a Wood Burning Appliance Changeout Program.

²³ U.S. EPA Burn Wise Publication, How to Implement a Wood-Burning Appliance Changeout Program, September 15, 2014; web link: https://www.epa.gov/sites/production/files/2015-08/documents/howtoimplementawoodstovechangeout.pdf

having Installers train homeowners following the installation. Districts will be required to obtain verification of training.

Co-benefits

In many communities throughout the State, uncertified wood stoves are a major source of air pollution. Replacing these highly polluting and inefficient stoves with cleaner home heating options can significantly reduce emissions of fine particulate (PM2.5), black carbon, and toxic air contaminants. These emission reductions will vary depending on the type of the replacement device, with the electric devices offering the greatest reductions. Certified pellet stoves and wood stoves or inserts should have significantly lower emissions compared to uncertified wood stoves based on their certification values. However, because the current U.S. EPA certification program fails to ensure that a wood stove performs consistent with the certification results, this Program provides incentives only for select wood stoves that are most likely to provide emission reductions under real-world conditions. To ensure that emission reductions do not diminish even further due to improper operation or lack of proper maintenance, each installation will be accompanied by education on proper device operation, maintenance, and importance of using seasoned wood.

Reductions in black carbon, PM2.5, and toxic air contaminants will reduce the impacts of climate change and improve indoor and outdoor air quality and visibility. In some parts of the State, the PM2.5 co-benefit reductions could have a significant impact on a region's ability to attain ambient air quality standards.

Reductions in PM2.5 pollution will have significant short- and long-term health benefits. Short-term exposures to PM2.5 can aggravate lung disease, causing asthma attacks and acute bronchitis, and may also increase susceptibility to respiratory infections. Long-term exposures have been associated with reduced lung function and the development of chronic bronchitis and even premature death.

Consumers should be able to save approximately 20 percent of their annual fuel cost through the use of professionally installed, certified, high efficiency pellet stoves or wood stoves.²⁴ Many old stoves are improperly installed, posing significant safety concerns, including health impacts and potential fires. Professional installation required under this Program will ensure that newly installed stoves meet local fire and building codes. If a replacement device is installed in a residence that does not have functional smoke and carbon monoxide detectors, the Program may pay for purchasing and installing new detectors. The Program may support the local economy and job creation by increasing demand for, and installation of, certified wood stoves and other clean heating devices.

²⁴ Based on the difference in efficiency between uncertified and certified stove: https://www3.epa.gov/ttn/chief/ap42/ch01/final/c01s10.pdf

Key Dates and Deadlines

CARB posted the Program Guidelines for public review and comments on November 7, 2022. The public comment period closed on December 8, 2022, and comments were reviewed and incorporated into the Program Guidelines where appropriate. As a next step, CARB will draft grant agreements with CAPCOA and/or individual Districts. These agreements must be signed and fully executed before funds can be released. If CAPCOA acts as an intermediary between CARB and the Districts, it will be required to enter into separate agreements with the Districts. These separate agreements must ensure compliance with these Program Guidelines and any agreement between CAPCOA and CARB. Any work done prior to a District grant agreement being fully signed and executed will be ineligible for funding. The deadline for executing all grant agreements is June 30, 2023 and the deadline for submitting requests for payment to CARB is April 1, 2025.

Reporting and GHG Quantification

CCI Funding Guidelines set tracking and reporting requirements for agencies that administer GGRF programs, such as CARB. Each District participating in the Program will be responsible for recordkeeping and providing CAPCOA and/or CARB with information necessary to fulfill Program reporting requirements. CAPCOA will be responsible for compiling the reports and submitting them electronically to CARB. All reports must be consistent with the CCI Funding Guidelines, ²⁵ quantification methodologies, ²⁶ reporting guidance, ²⁷ and the requirements established in these Guidelines. The Program implemented in each participating District will be considered a Project with most of the reporting done on a Project basis. The Project will be comprised of all change-outs for which Program funds are being used, within the District's jurisdiction, along with the administrative work required to implement them. Some reported Project information will be publicly available on the CARB website, including the amount of funding spent on change-outs that benefit disadvantaged communities, low-income communities, and low-income households.

In order to document and calculate reductions in GHG, black carbon, and PM2.5 emissions, and document other co-benefits and benefits to disadvantaged communities, low-income communities, and low-income households, CAPCOA and/or Districts will be responsible for collecting and maintaining the following information for each change-out:

- Tracking number for each change-out;
- Location of change-out;

²⁵ https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/2018-funding-guidelines.pdf

²⁶ Available at www.arb.ca.gov/cci-quantification

²⁷ ibid.

- Incentive amount and, if applicable, verification that Applicant qualifies for an Enhanced Incentive based on the location of the property in a disadvantaged, low-income, or tribal census tract or Applicant's household income;
- Documents proving the change-out benefits a disadvantaged community, low-income community, or low-income household and description of how the change-out meets respective community need(s);
- Type of wood burning device being replaced (stove, insert, or fireplace);
- Replacement device type and make and model;
- Quantity of wood burned annually before replacement;
- Replacement device emission rates and efficiency (if available and applicable);
- Installation date;
- Copy of final permit (City, County, or State);
- Photographic evidence of change-out completion, including "before" and "after" photos showing the devices in relation to the room where they were/are installed;
- Verification of destruction of uncertified stove (including recycling if available locally) or, where applicable, verification of rendering fireplace and chimney permanently inoperable, unless replacement device is an electric heat pump and the recipient keeps the uncertified stove to use only in case of electricity loss;
- Verification that the recipient was trained on device operation and maintenance and, if applicable, following best practices in wood storage and wood burning for residential space heating;
- GGRF dollars spent; and
- Information on jobs and training opportunities created and whether employees are residents of disadvantaged or low-income communities or low-income households.

Documentation of each wood stove replacement must include all of the parameters above, which are necessary for quantifying the reductions. Record keeping and tracking will be retained by CAPCOA or the District for three years after the Project Closeout report is submitted.

Net GHG reductions from wood stove replacement will be calculated using the CARB approved GHG Quantification Methodology for Fiscal Year 2021-2022 available at the *Capand-Trade Auction Proceeds Quantification Materials* webpage. ²⁸ CARB will also develop methodologies to quantify some additional Project co-benefits. CAPCOA will be responsible for performing calculations and reporting results to CARB as part of the reports outlined above.

²⁸ https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials

Disbursement of Funds

Funds cannot be disbursed until there is a fully executed grant agreement between CARB and CAPCOA and/or the individual District. Only those actual and direct Program related costs incurred during the approved term of the grant agreement and as specified in the grant agreement budget will be eligible for payments.

Each District shall maintain an accounting system that accurately reflects fiscal transactions with the necessary controls and safeguards. The accounting system must retain itemized receipts and invoices for all Program funds for at least three years after final payment is made by CARB.

Program Review

The State of California has the right to inspect all work and associated records at any time over the Project life. This right shall extend to any subcontracts, and CAPCOA and/or Districts shall include such access in all their contracts or subcontracts.

CARB shall review a sufficient number of Projects each year to ensure proper Program implementation. The District responsible for the Project selected for program review will be contacted at least 30 days in advance. The program review should include all books, papers, accounts, documents, photographs, and other records related to the Project for which Program funds were used. The District will be expected to assign an employee familiar with the Project and accounting procedures to assist the State reviewer and have the Project records, including cancelled warrants, readily available for inspection.

If the program review reveals that the District did not follow these Guidelines and/or the grant agreement, does not have proper documents to demonstrate following Guidelines and/or the grant agreement, or violated any State or federal law or policy, a corrective action plan will be put in place. The District will have three months to implement the corrective measures. A follow-up program review will be conducted to verify that the deficiencies are fully mitigated. If the corrective actions were not implemented or new problems were discovered during the follow-up program review, a second corrective action plan will be established. If the second follow-up program review is less than satisfactory, the grant agreement with that District will be terminated immediately and the District will be prohibited from receiving any future funding from this Program. The District may be required to fully or partially repay Program funds spent in violation of these Guidelines and/or the grant agreement.

The following are examples of Program deficiencies:

- Replacing a wood stove, wood insert, or fireplace not eligible for the Program;
- Installing a device not eligible for the Program;
- Issuing an Enhanced Incentive to an ineligible Applicant;

- Exceeding the maximum amount of \$10,000 for an electric heat pump or \$5,000 for any other replacement device for Enhanced Incentive and \$5,000 for an electric heat pump or \$2,500 for any other replacement device for a Standard Incentive);
- Failing to properly document each change-out;
- Failing to remove and properly dispose of the old stove (except if the replacement device is an electric heat pump); and
- Allowing an Applicant to install his/her replacement device.

If deficiencies are identified during a program review, CARB will be responsible for communicating them to the District, giving the District an opportunity to respond, and, if necessary, assist in drafting a corrective action plan. Districts must make every effort, including requesting assistance from CARB, if necessary, to ensure that the deficiencies are fully mitigated.